L TE/CMPN/IV CREV 23/5/2012
Microprocessor

ws May-2012 1

Con. 3925-12. **GN-6962**

(3 Hours) **[Total Marks : 100**

N.B. : (1) Question No. **1** is **compulsory**.
(2) Solve any **four** questions from **remaining**.
(3) **Figures** to the **right** indicate makrs.
(4) Assume data if **necessary**.

1. (a) Explain addressing modes of 8085 microprocessor with example. **10**
   (b) What is segmented memory ? State the advantages of it wrt 8086 microprocessor. **10**

2. **(a)** What is meant by DMA ? Show interfacing of 8237/57 with 8086 and explain. **10**
   (b) Explain following instructions with one example each (wrt 8086). **10**
   (i) SAL (ii) TEST (iii) STOS (iv) CMP (v) JC.

3. (a) Explain the operation of IC 8259 with block diagram. **10**
   (b) Write an assembly language program for 8086 to exchange the blocks of 1 kB located at 0100 H and 0200 H using string instructions. **10**

4. (a) Explain Assembler directives of 8086. **10**
   (b) What are the various modes of operation of 8255 PPI ? **10**

5. (a) Explain the addressing modes of 8085 microprocessor. **10**
   (b) Draw the timing diagram and explain for : **10**
   (i) Memory read in minimum mode
   (ii) Memory write in maximum mode.

6. (a) Explain Interrupts of 8086 in detail. **10**
   (b) **(i)** Explain Generation of Address and data Bus. **5**
   (ii) Differentiate between memory mapped I/O and I/O mapped I/O. **5**

7. Write short notes on any **three** :– **20**
   (a) RS 232 serial Interface Standard
   (b) Memory Banking in 8086
   (c) 8284 Clock Generator
   (d) 8288 Bus Controller.